



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/705,415	11/10/2003	David Martin	P-0201-PA	5186

22145 7590 08/23/2005

KLEIN, O'NEILL & SINGH  
2 PARK PLAZA  
SUITE 510  
IRVINE, CA 92614

EXAMINER
----------

LEJA, RONALD W

ART UNIT	PAPER NUMBER
----------	--------------

2836

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SP

<b>Office Action Summary</b>	<b>Application No.</b> 10/705,415	<b>Applicant(s)</b> MARTIN ET AL.	
	<b>Examiner</b> Ronald W. Leja	<b>Art Unit</b> 2836	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 4/22/2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/10/03; 4/22/04</u> . | 6) <input type="checkbox"/> Other: _____  |

Claims 6 and 9 are objected to because of the following informalities: In line 4 of Claim 6, "the predetermined current level" should be "a predetermined current level" and in line 10 of Claim 9, "Tip" should be "Ring". Appropriate correction is required.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Casey et al. (6,104,591) in view of Curry (6,266,223) and Debalko (5,721,773).

Casey et al. disclose a protection scheme as applied to TIP and Ring communications (see Fig.s 9 & 10), wherein in each Tip and Ring line there is a series circuit comprising a thermally-responsive grounding switch (172,174) and a solid-state heat-generating resistive element (136,138); (see also Col. 9, lines 50-59), but do not disclose the use of a gas discharge tube protector or first and second suppression elements respectively connected in parallel with each heat-generating resistive element

Art Unit: 2836


(136,138). Although the preambles of the independent claims, by use of the phrase “wherein the improvement comprises”, admits that the use of gas discharge tube protectors having Tip and Ring terminals is known, Curry has been cited to illustrate the known gas tube devices (see Fig. 2) element (134). It would have been obvious to incorporate the use of a gas tube as a means to conduct the bulk energy associated with a large transient, thereby increasing protection of the lines and attached load devices. The claims further essentially require the use of first and second surge suppression elements being in parallel with the heat-generating resistive elements and that such elements are bipolar transient voltage suppression diodes and that the clamping does not interfere with the tripping of the switches due to the heating from the resistive elements and that the clamping voltage is in the range of 10v-17v. Casey et al. do not disclose the use of parallel surge suppression devices with the resistive elements. However, Debalko teaches the use of various parallel-connected devices (i.e. within SW1 & SW2) and VB1 and VB2 being connected in parallel across various resistive elements and offering protection to the circuit including switches SW1 and SW2. It is taught that VB1 and VB2 can be any breakdown device including solid-state device (see Col. 3, line 50 et seq.). It is the opinion of the Examiner that it would have been obvious to offer parallel protection to the heat-generating resistors as a means to help increase longevity of the overall protection device. As far as the particular solid-state device chosen and the chosen range of protection, such limitations would have been obvious as a means to optimize the circuit performance for the particular application-at-hand and anticipated transient levels, thereby resulting in a highly reliable end-product.

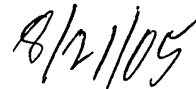
Art Unit: 2836

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald W. Leja whose telephone number is (571)272-2053. The examiner can normally be reached on Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (571)272-2800. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Ronald W Leja  
Primary Examiner  
Art Unit 2836



rwl  
August 21, 2005